

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:	Masayuki TSUNEKAWA et al.) Group Art Unit:
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TITLE:	POLARIZABLE ELECTRODE FOR ELECTRIC DOUBLE LAYER CAPACITOR, METHOD FOR MANUFACTURING SAME AND ELECTRIC DOUBLE LAYER CAPACITOR	

AMENDED CLAIMS

1. (original) A polarized electrode for an electric double layer capacitor comprising a collector and an electrode active material layer provided at least on one surface of the collector in a predetermined pattern form, wherein the pattern form is at least composed of the electrode active material layer arranged intermittently in longitudinal direction of the collector.
2. (original) A polarized electrode for an electric double layer capacitor according to Claim 1, wherein the electrode active material layer in a pattern form is provided on both surfaces of the collector, the pattern form being the same on both surfaces or different on each surface.
3. (original) A method for producing a polarized electrode for an electric double layer capacitor having at least a pair of polarized electrodes, a separator and an electrolytic solution sealed in a container comprising at least steps of:
 - a) providing a collector;
 - b) providing an electrode active material composition;
 - c) forming an electrode active material composition layer in a predetermined form by applying the electrode active material composition on the collector so that a coated section having the electrode active material composition coated on the collector and a non-coated section not having the

electrode active material composition coated on the collector are provided in a predetermined period in a running direction of the collector, and drying the electrode active material layer;

d) pressing the collector on which the electrode active material layer is formed in the pattern form; and

e) slitting the collector after pressing in a predetermined size.

4. (currently amended) A method for producing a polarized electrode for an electric double layer capacitor having at least a pair of polarized electrodes, a separator and an electrolytic solution sealed in a container, the polarized electrode being formed with an electrode active material layer provided at least on one surface of a collector in a pattern form, wherein the pattern form is at least formed intermittently in longitudinal direction of the collector, comprising at least steps of:

a) providing the collector;

b) providing an electrode active material composition;

c') forming the electrode active material ~~composition~~ layer in a predetermined form by applying the electrode active material composition on the collector so that a coated section having the electrode active material composition coated on the collector and a non-coated section not having the electrode active material composition coated on the collector are provided in a predetermined period in a running direction of the collector by a die-coating method in which a die head supplies the electrode active material composition intermittently, and drying the electrode active material layer;

d) pressing the collector on which the electrode active material layer is formed in the pattern form; and

e) slitting the collector after pressing in a predetermined size.

5. (currently amended) A method for producing a polarized electrode for an electric double layer capacitor according to Claim 4, wherein the c') step

comprises a step of:

c'') forming the electrode active material ~~composition~~ layer in a predetermined form by applying the electrode active material composition on the collector in such a manner that the electrode active material composition is continuously supplied to a die head while the die head moves away and approaches the collector and/or the collector moves away and approaches the die head so that a coated section having the electrode active material composition coated on the collector and a non-coated section not having the electrode active material composition coated on the collector are provided in a predetermined period in a running direction of the collector, and drying the electrode active material layer.

6. (currently amended) A method for producing a polarized electrode for an electric double layer capacitor having at least a pair of polarized electrodes, a separator and an electrolytic solution sealed in a container, the polarized electrode being formed with an electrode active material layer provided at least on one surface of a collector in a pattern form, wherein the pattern form is at least formed intermittently in longitudinal direction of the collector, comprising at least steps of:

a) providing the collector;

b) providing an electrode active material composition;

c''') forming the electrode active material ~~composition~~ layer in a predetermined form wherein a coated section and a non-coated section of the electrode active material composition is provided on the collector so that the coated section and the non-coated section are arranged in a predetermined period in a running direction of the collector in such a manner that while the electrode active material composition is supplied on a first roll followed by scraping with the use of a comma head to obtain a predetermined amount and the electrode active material composition of the predetermined amount is transferred on the collector running along a second roll by a comma reverse

method, the second roll moves away and approaches the first roll, and drying the electrode active material layer;

d) pressing the collector on which the electrode active material layer is formed in the pattern form; and

e) slitting the collector after pressing in a predetermined size.

7. (currently amended) An electric double layer capacitor having at least a pair of polarized electrodes for the electric double layer capacitor according to Claim 1 [[or 2]], a separator and an electrolytic solution sealed in a container.

8. (currently amended) An electric double layer capacitor having at least a pair of polarized electrodes produced by the method for producing a polarized electrode for an electric double layer capacitor ~~according to any of Claims 3 to 6~~ Claim 3, a separator and an electrolytic solution sealed in a container.

9. (new) An electric double layer capacitor having at least a pair of polarized electrodes produced by the method for producing a polarized electrode for an electric double layer capacitor according to Claim 4, a separator and an electrolytic solution sealed in a container.

10. (new) An electric double layer capacitor having at least a pair of polarized electrodes produced by the method for producing a polarized electrode for an electric double layer capacitor according to Claim 5, a separator and an electrolytic solution sealed in a container.

11. (new) An electric double layer capacitor having at least a pair of polarized electrodes produced by the method for producing a polarized electrode for an electric double layer capacitor according to Claim 6, a separator and an electrolytic solution sealed in a container.